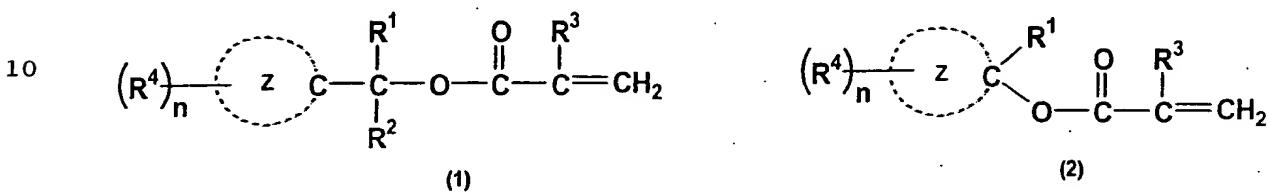


ABSTRACT

The photoresist resin composition comprises a polymer containing an acid-responsive compound unit of the following formula (e.g. an adamantane skeleton) and a photoactive acid precursor. R¹ may be an alkyl group having a tertiary carbon atom in the 1-position and the Z ring is a bridged-ring hydrocarbon ring comprising 2 to 4 rings.



wherein R¹ and R² are the same or different from each other and each represents a hydrogen atom, an alkyl group or a cycloalkyl group; R³ represents a hydrogen atom or a methyl group; R⁴ represents a hydrogen atom, a halogen atom, an alkyl group, an oxygen-containing group, an amino group or an N-substituted amino group; the Z ring represents a monocyclic or polycyclic alicyclic hydrocarbon ring; n represents an integer of not less than 1; with proviso that R⁴ does not concurrently represent a hydrogen atom, and may be different over n occurrences; in formula (1), R¹ and R² may, jointly and together with the adjacent carbon atom, form an alicyclic hydrocarbon ring. The above photoresist resin composition is high in etching resistance, can be solubilized by irradiation, and is capable of providing a finer line pattern.